

## Meeting Minutes of the Federal Interagency Committee on Emergency Medical Services

July 12, 2011

### **Introduction**

The Federal Interagency Committee on Emergency Medical Services (FICEMS) met on Tuesday, July 12, 2011 from 1:00 p.m. to 4:00 p.m. at the Department of Homeland Security Office of Health Affairs in Washington, D.C.

### **Members in Attendance**

#### **Department of Homeland Security (DHS)**

Alexander Garza, M.D., MPH,  
Chair,  
Assistant Secretary for Health Affairs and Chief Medical Officer

Glenn Gaines,  
Acting Administrator, U.S. Fire Administration

#### **Department of Transportation (DOT)**

David Strickland,  
Administrator, National Highway Traffic Safety Administration (NHTSA)

#### **Department of Health and Human Services (HHS)**

Jean K. Sheil,  
Director, Emergency Preparedness and Response Operations  
Centers for Medicare & Medicaid Services (CMS)

Terry Adirim, M.D., M.P.H.,  
Director, Office of Special Health Affairs,  
Health Resources and Services Administration

Rick Hunt, M.D. (via telephone)  
Director, Division of Injury Response  
Centers for Disease Control and Prevention (CDC)

**Department of Defense (DOD)**

Larry Sipos

Acting Deputy Assistant, Secretary of Defense for Force Health  
Protection & Readiness.

**State EMS Director**

Robert Bass, M.D.

Executive Director

Maryland Institute of Emergency Medical Services Systems (MIEMSS)

**Background**

The Federal Interagency Committee on Emergency Medical Services (FICEMS) was established by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (42 U.S.C. 300d-4). FICEMS is charged with coordinating Federal Emergency Medical Services (EMS) efforts for the purposes of identifying state and local EMS needs, recommending new or expanded programs for improving EMS at all levels, and streamlining the process through which Federal agencies support EMS.

**Binder Contents**

Meeting Agenda

FICEMS Membership July 2011

FICEMS Authorization Statute

Draft FICEMS Meeting Minutes, June 24, 2010

Technical Working Group Updates – Final July 2011

Draft FICEMS Interim Report for H-09-05 July 2011

Model Inventory of Emergency Care Elements (MIECE)

EMS Incident Response and Readiness Assessment (EIRRA)

National EMS Assessment Executive Summary

**MEETING SUMMARY**

**OPENING REMARKS**

The July 2011 FICEMS meeting was called to order by Alexander Garza, Chair, Assistant Secretary for Health Affairs and Chief Medical Officer of the Department of Homeland Security. He welcomed the members of the committee, staff and the public. Garza noted that much progress had been made regarding FICEMS work and recognized the Technical Working Groups for their dedication and commitment. FICEMS' emphasis for 2011 has been the development of an options paper on a lead Federal agency for emergency medical services. The options paper includes input from the broad EMS community. Garza thanked the National Security Staff for their contribution and recognized that there has been a large interagency effort and stakeholder input for the options paper. This contribution was submitted to the White House in May. Garza commented that he's certain they are using the information to come to a decision on a lead Federal agency for FICEMS.

### **APPROVAL OF MINUTES**

The chair asked for a motion to approve the minutes from the January 2011 FICEMS meeting. David Strickland so moved. The motion was seconded. The minutes were unanimously approved.

### **Culture of Safety Project Update**

Garza noted that in 2008 the National EMS Advisory Council (NEMSAC) made as its top recommendation that the Federal government develop a national culture of safety strategy. The safety of EMS providers and patients is paramount and ensuring that safety is the responsibility of stakeholders at all levels. The national Culture of Safety project is underway and is being led by the American College of Emergency Physicians (ACEP) through a competitively awarded cooperative agreement with NHTSA. It is co-funded by the Emergency Medical Services for Children program. Garza then introduced Dr. Bob O'Connor, an emergency physician from the University of Virginia Health System and member of the board of directors of ACEP, who participated by telephone.

Dr. O'Connor began the update with a PowerPoint presentation and brief background on the Culture of Safety project. The three-year project that began in September 2010 is scheduled to be completed by September 2013. EMS is a high-risk industry and the occupational hazards to EMS personnel are similar to those of fire and other emergency responders:

- Navigating an emergency vehicle through traffic can pose numerous challenges and be risky for responders in the vehicle, for patients, and the public.
- Medication errors, exposure to infectious disease, and health and fitness of responders. Health and fitness of responders is a very serious issue in terms of career longevity and the safety of EMS providers.
- A couple of problems with data have been identified. For example, there is a lack of information about worker injuries in the EMS data system.

The Project is guided by an 18-member steering committee from 18 national EMS organizations. In June, the committee held a conference at which a number of Web recordings were made about the Culture of Safety Project and are now available. The meeting was the first major milestone for the Culture of Safety project.

The next major milestone will be to develop a series of draft strategies which will be reviewed by the steering committee, NHTSA and NEMSAC. The first draft is due at the end of August and the third draft should be delivered before the national review meeting in June of 2012. After review and comment, the draft will be revised and should be completed by the end of the project. Key project personnel are Dr. Sabina Braithwaite, ACEP, assisted by Pat Elms and Rick Murray who are ACEP staff from the EMS and Disaster Preparedness Department.

The Red Flash Group is a subcontractor on the project and is drafting the strategies document, conducting research on EMS safety literature, and creating a communications

plan. All 18 organizations sent representatives to the meeting in June. O'Connor also listed several other affinity groups that will be making contributions to the Culture of Safety Project. There is wide range of representation on this project and that includes most of the important stakeholders that should have input including Federal agencies and media, which are expected to help disseminate the contents of the final work product.

The June 2011 Culture of Safety National Conference had 92 attendees including members of the steering committee, national EMS organizations, invited guests and members of the public. The conference utilized formal presentations and covered the following areas:

- Engineering for Better Outcomes;
- Culture Change;
- Lessons from the Institute for Health Care Improvement;
- The Intersection of EMS Public and Patient Safety;
- Building a Culture of Safety from the Ground Up;
- Firefighter Life Safety Initiatives using the Everyone Goes Home project.

Presentations were followed by breakout sessions where groups were asked to answer pre-assigned questions and report back at the end of the day. Once the strategy document is completed and approved, it will be widely disseminated through the national EMS community.

#### **National Security Staff Update**

Garza moved to the National Security Staff's Ed Dolan to give their brief update on a Federal lead agency for EMS. Dolan stated that he works for Richard Reed who sent the original letter to FICEMS back in January. On behalf of NSS, he thanked FICEMS for the incredible amount of hard work that went into the report. The report is now in the Federal deliberative policy process which means that it is under consideration. NSS will continue to update FICEMS as there are developments. There are no updates right now, but NSS wanted to be represented at the FICEMS meeting in case there were questions.

Garza thanked Dolan and asked him to stay in case there are questions later in the meeting.

Terry Adirim asked about NSS next steps.

Dolan responded that it is a bit detailed explaining how NSS works through an interagency policy process where the different cabinet-level agencies are represented at the Assistant Secretary level, or the Deputy Secretary level. NSS can assemble the Secretaries if there is a need. NSS is consulting with all the departments who have a role in emergency medical services to determine the best result on a lead agency. All those Departments will collectively make their recommendations to the President through the NSS. When there is a decision out of that process NSS will announce it.

Louis Lombardo (from the public) asked if FICEMS has national goals. If so, he asked what they are and if there is a timeline for achieving these goals. As part of the question, he used former Secretary Robert Gates' citation of improvements in Medivac transport times to delineate the kind of goal to which he is making a reference.

Garza responded that he's not sure if that's a question about the lead options paper. But as a member of the U.S. Armed Forces Reserves and Medical Corps (Garza is responding from his personal experience), he understands Secretary Gates' emphasis on this issue. He adds however, that there is a difference between DOD assets and USG (United States Government) assets. In the case of the former, Secretary Gates had the power to execute that mission. Whereas in the country it's a little bit different, as those assets are not under any single control by the government.

Lombardo asked the question again and put an emphasis on the issue of goals.

Garza responded that he understood the question. He noted that objectives and progress towards FICEMS goals would be evident in subsequent reports to be made during the course of the meeting.

Garza thanked Mr. Lombardo for his questions, and asked if he had anything else to add. He addressed the rest of the meeting and asked if there were other questions from the public regarding the Federal lead agency.

#### **TECHNICAL WORKING GROUP (TWG) COMMITTEE REPORTS, WORKPLAN UPDATES/PROGRESS**

Next were the Technical Working Group Work plan Updates. Garza asked that issues requiring a vote be held until the end of all of the reports and that there would be a vote on all of those issues once.

#### **OVERVIEW**

Drew Dawson with the NHTSA Office of EMS introduced himself and explained his role as Chair of the FICEMS Technical Working Group (TWG). The TWG is comprised of staff-level representatives from all FICEMS agencies and meets monthly via conference call to discuss ongoing projects and help to align priorities among the various agencies. FICEMS approved the creation of six permanent and one ad hoc committee and each will be presenting a very brief update. Dawson noted that the TWG has worked closely across numerous departments and agencies and a number of the projects are now coming to fruition. The TWG committees have developed reports on pediatric emergency care, the designation of a Federal lead office for EMS, and have overseen the development of the National EMS Assessment. The committees are in the beginning stages of developing an annual report to Congress as is required by statute and have begun work on a more strategic approach for FICEMS work overall. The strategic planning process will address the objectives and goals of FICEMS. This will be discussed later in the meeting.

First to report is Cathy Gottschall from the NHTSA Office of EMS. She presented on behalf of the chair, Rick Patrick, DHS Office of Health Affairs, who was unable to attend.

#### **Assessment Committee**

Cathy Gottschall stated that work for the past six months concentrated primarily on the National EMS Assessment report. The committee reviewed extensively the nearly 300-page draft document and prepared comments for the investigators who submitted the draft. The draft summarizes the key findings of the process.

Larry Sipos asked whether the draft report was due June 30<sup>th</sup>.

Gottschall responded that June 30<sup>th</sup> was the initial delivery date, but NHTSA requested a no-cost 30 day extension for the investigators. She further explained that the mid-year FICEMS meeting is usually in June; however, since the mid-year meeting took place in July, the deadline was extended to get additional input from FICEMS into the final report.

Dawson next called on Dr. Rick Hunt to provide the update for the Medical Oversight Committee

#### **Medical Oversight Committee**

Hunt thanked participants for the many contributions to progress on the FICEMS/NEMSAC model process for pre-hospital evidence-based guidelines. The model process was developed by the Committee and subject matter experts based on stakeholder input from FICEMS and NEMSAC at a September 2008 conference. It was approved by FICEMS and NEMSAC in 2009. A pilot test of the model was funded by EMS for Children program in 2009-2010, the focus of which was pre-hospital treatment of pediatric seizures. The pilot focused on guideline development process, not on implementation.

A second pilot test of the model for pre-hospital, evidence-based guideline development was funded by NHTSA with additional support from the EMS for Children Program 2009-2010. There was a competitive award made to Children's National Medical Center to pilot on guideline development and implementation that would be applicable for both children and adults. The topics that were selected included prehospital pain management and helicopter transport of injured patients. Because the Children's National Medical Center senior investigator was the Medical Director of Pediatrics in Maryland, the state of Maryland was chosen as the implementation site.

A multi-disciplinary expert panel was convened to identify relevant clinical questions, research and publish evidence regarding the test of the evidence-based guideline model process. Following the expert panel meetings in 2010, investigators completed EMS draft protocols along with supporting documentation for both helicopter EMS and pain management. The Maryland Institute for EMS Systems (MIEMSS) protocol review committee met in late 2010 and adopted a modified version of the pain management

protocol. The helicopter EMS protocol was not adopted. While the evidence-based protocol was very similar to the existing MIEMSS protocol, the use of online medical direction was left to the discretion of the provider as long as it did not result in a time delay.

An educational curriculum was developed for all Maryland providers on the new pain management protocol and providers were required to complete the training by July 1, 2011. The implementation/evaluation plan is nearing completion for that and data on protocol compliance and patient outcomes will be collected for about six months. There is a final report on this due to the Medical Oversight Committee in January 2012 and the project ends in March 2012. On the status of the guidelines' release and publication, the project investigators have begun discussions with the editor of the Journal of Academic Emergency Medicine. They are trying to negotiate for free access to the article so it's open to all in the EMS community. Dawson requested that Hunt provide a brief summary of the committee two year work plan.

Hunt explained that the working group's focus areas are helicopter EMS and evidence-based guidelines. The objectives for helicopter EMS are to provide input and guidance for the development of national guidelines for the use, availability and transport by regional, state and local authorities, during emergency medical response system planning. Potential outputs would be periodic reports back to FICEMS as a whole on progress towards the National Transportation Safety Board (NTSB) recommendations and the clinical and systems guidelines for helicopter EMS transport of patients with time-sensitive conditions.

The second focus area is on evidence-based guidelines of which helicopter EMS and all the others mentioned are a subset. In broad terms the objective would be to promote the development, implementation, evaluation and use of evidence-based guidelines for pre-hospital care with outputs to further develop, implement and disseminate evidence-based guidelines. Those involved understand development very well, but implementation and dissemination are equally labor-intensive and challenging and speaks to the translation of science into solid practice in an EMS community with a million providers.

#### **Data and Research Committee**

Dawson introduced Susan McHenry of the Data and Research Committee, who began by highlighting a few accomplishments from the committee's report. With regard to the committee's first objective of trying to educate Internal Review Boards and researchers on exception to informed consent for emergency research. The committee conducted two Web casts, the first of which was in February for general emergency care research. The aim was to review the entire body of regulations to ensure they were as user friendly as possible. At the end of March the committee held a Web cast specifically for pediatric emergency care. These sessions were very successful.

The committee is currently working cooperatively with the Office of the Assistant Secretary for Preparedness and Response (ASPR) and the Council on Emergency Medical Care and the Emergency Care Coordination Center on hosting an IRB options

conference to look at different alternatives for how to conduct internal review of research opportunities for emergency care research. Originally this was scheduled for April 11 and 12 but has been re-scheduled for September 19 and 20 in downtown DC.

On the objective related to the National EMS Information System (NEMSIS) and efforts to get people to really use that effectively, there are several different activities. The committee has just initiated a NHTSA-funded project to evaluate linked data between EMS data and Trauma registry data in four states. The aim is to produce much richer information on what is happening with injured patients, as well as the ability to look at outcomes.

The CDC recently published public health preparedness capabilities national standards for state and local planning. These include some resource elements under medical surge for resource planning that recommend that public health staff be trained on how to use EMS and 911 data to help them with syndromic surveillance. The committee is working with the NEMSIS Technical Assistance Center at the University of Utah to hold an introductory Webinar for state and local health officials to learn more about what NEMSIS is, what that information system might produce for them, and how they might access the right people at the local and state levels. In addition, the first peer-reviewed article based on national NEMSIS data on out-of-hospital airway management by Dr. Henry Wang was published in April in the Journal *Resuscitation*.

NHTSA has made progress harmonizing the National EMS Information System Version 3.0 with the Health Level Seven (HL7) Standard Development Organization. It will yield the ability to synchronize EMS data with Electronic Health Records. The committee is about a year ahead of schedule with that process.

The committee believes there is much work to be done with the Culture of Safety and they want to respond to data and research needs that may be identified through that project. There is also an ongoing need to promote and support EMS research, find more adequate funding, and support the initiatives that provide the evidence needed for the evidence-based practice guidelines under discussion.

McHenry then opened the floor to questions.

Garza asked which four states participated in the NEMSIS and Trauma data projects. The four states are Utah, North Carolina, Kansas and Alaska.

McHenry was asked how many states were reporting under NEMSIS currently. McHenry said there were 30 states and territories currently submitting, with over 15 million records. The 2010 research data set will be released on July 21.

McHenry was asked if, when the states report, they were reporting real time. McHenry said that it varies. She explained that while movement in the long run is towards real time data, there are some states that are submitting data almost hourly; and others

submitting data based on what their state regulations mandate, which might be monthly or quarterly.

Finally, McHenry was asked if she would encourage states to motivate those who report NFIRS (the National Fire Incident Reporting System) data to adopt that same zeal. McHenry said that on August 18, Brad Peabody and his team from USFA would be coming to the NHTSA office to meet and talk about how they can better coordinate work.

### **Preparedness Committee**

Dr. Robert Bass gave an interim report on the work of the Preparedness Committee. Bass directed the group's attention to Tab 4 (in the binder) for a written report. The work plan focused on three areas:

- Pandemic influenza preparedness
- Mass Casualty Incident (MCI) Triage
- Mass Casualty Incident (MCI) Preparedness

With respect to influenza preparedness, the committee is continuing to monitor the implementation of the FICEMS plan drafted last year. The plan was the subject of a FICEMS executive session in November 2010. As for the MCI triage, the committee is continuing to work with the Medical Oversight Committee regarding the Model Uniform Core Criteria (MUCC) for mass casualty triage. There has been significant discussion on the MUCC recently, and the committee is preparing a briefing paper for FICEMS tentatively planned to be presented at the December meeting. With respect to MCI preparedness, the committee has been providing ongoing feedback to the National EMS Assessment and reviewed the first draft in May. The committee has also been providing technical guidance to FEMA on its ongoing assessment efforts and input to ASPR on the National Health Security Strategy.

The committee has also been focused on the two NTSB issues sent to FICEMS last year, including the Mexican Hat motor coach crash. There were two issues related to the information received from the NTSB. One concerned 911 access and the other related to response. The committee has completed the 911 piece and is continuing work on H-09-5 or Tab 5 in the binders, which is the interim report being sent to NTSB. As previously approved by FICEMS, NHTSA provided funding to the Institute of Medicine (IOM) as well as the National Association of State EMS Officials (NASEMSO) to help respond to recommendations sent to the committee by NTSB. The IOM held a forum last August on Preparedness and Response to a Rural Mass Casualty Incident. It focused on both the Mexican Hat incident and the Albert Pike, Arkansas flood. The report contains a lot of feedback from people all across the country on how to respond to rural MCIs.

Tabs 6 and 7 contained two handouts. First was MIECE, the Model Inventory of Emergency Care Elements. The second was the EMS Incident Response and Assessment (EIRRA) tool. Both will be included in the interim report to the NTSB. Bass asked Dia Gainor to provide more background on the MIECE and the EIRRA. Gainor is the former chair of the National EMS Advisory Committee and state EMS Director in Idaho. Since

then she's stepped down as the inaugural chair of NEMSAC and accepted the position as Executive Director of the National Association of State EMS Officials.

Bass asked for questions. Adirim noted that the White House recently set up a rural council and many departments were members. She said that 60 percent of what they covered was related to health.

### **Safety Committee**

Dave Bryson gave the Safety Committee's report. He told FICEMS that Bill Troop and Jim Green had joined the committee. The committee is focused on:

- EMS provider safety and health
- EMS patient care safety
- EMS safety data research.

The Safety Committee developed a FICEMS EMS health and safety position statement on which this group took action. The committee recently finished a process in which the Department of Homeland Security Office of Health Affairs, as well as the U.S. Fire Administration, partnered to perform an EMS responder safety study, information that will go into the existing U.S. EMS Safety Techniques and Applications as well as the Guide to Developing and Managing an Emergency Service Infection Control Program. The Safety Committee has also communicated regularly with a number of committees, particularly the Medical Oversight Committee and had interaction with the National EMS Advisory Council. Most members also participated in the June 2011 National EMS Culture of Safety conference. Next steps for the committee are to continue to work and support safety related efforts, particularly within the Federal government, maintain a proactive relationship with the Culture of Safety Project, and working to revise the workplan for 2012 through 2014.

### **Education and Workforce Committee**

Dawson noted that there was no Education and Workforce Committee report.

### **Health Care Reform Ad Hoc Committee**

Andrew Roszak gave the committee update. The committee provided copies of all the letters sent out as well as the responses to all but one. The outstanding response is one from the Government Accounting Office (GAO), which set up the National Health Care Workforce Commission. They did appoint members to the commission, but due to a lack of appropriated funds the commission has not begun meeting. This likely explains why we haven't received a response. The letter from the National Quality Forum regarding the initiative on Regionalized Emergency Medical Care has moved forward and Roszak noted that he co-chairs the steering committee for that project.

He said that in approximately one week the committee would be releasing a draft framework on quality measures for public comment. The comment period will last about a month and afterwards, the committee will revise the framework accordingly. On the health care reform front, CMS is actively engaged with the accountable care

organizations' rulemaking program. There's been a little interest from the ambulance and paramedic community to make sure that EMTs, paramedics, and community paramedics could participate once the accountable care organizations are set up. The committee has been monitoring that activity. Minnesota recently passed a law that would provide Medicaid reimbursement for community paramedics. The committee will continue to monitor health care reform, especially through the appropriations process for FY 2011-12. Roszak offers to take questions.

Adirim asked Roszak to remark on the provisions related to EMS and trauma with ACA.

Rozsak directed people to the binders where there was a copy of the 2010 report submitted when the committee was first set up. Many of these provisions, perhaps all, have been authorized but not yet appropriated. So, even as health care reform begins to be implemented, these particular provisions haven't been started due to a lack of funds. There is a detailed report of the top six identified in 2010. These were the genesis of the letters that FICEMS sent out.

Garza thanked Roszak and entertained a motion to make any changes or additions to the two-year work plans. Strickland made the motion. It was seconded, there was no discussion and passage is unanimous. He called on Dr. Bass to update FICEMS on the NTSB response to FICEMS' actions on the Mexican Hat Bus crash.

### **National Transportation Safety Board (NTSB) Recommendations**

Bass said the group has been working diligently on this response to recommendation H-09-5 which deals with MCI response in rural areas. As mentioned earlier, there was the IOM workshop and work that's been done by the National Association of State EMS Officials, as well as the EIRRA and the MIECE documents which the committee hopes to finalize by the end of the year. Dr. Bass introduced Dia Gainor.

### **Dia Gainor**

Gainor began by noting that the presentation would be on two separate, but related projects. The creation of the documents (EIRRA and MIECE) was driven by the recommendations in the NTSB report. The group was funded by NHTSA to fulfill what the National Association of State EMS Officials called the Rural Highway Safety Project. It was assigned to the Highway Incident and Transportation Systems committee which Gainor chaired. The work created a great partnership opportunity with some Federal agencies and national associations with whom the committee didn't have well established relationships, especially the Federal Highway Administration (FHWA). It also resulted in an improved relationship with the American Association of State Highway and Transportation Officials (ASHTO) and the Governors Highway Safety Administration, for example.

There were two deliverables, EIRRA and MIECE. First, Gainor covered EIRRA. Given the recommendation, the committee focused on the phrase "develop guidelines for emergency medical service response" and on providing those guidelines to states. In effect, the assessment *is* the guidelines. Gainor emphasized that the assessment was

designed to suggest what localities should do, or do more of, to respond to emergency incidents. The recommendation was directed at FICEMS, ASHTO and FHWA, which was key because all are faced with figuring out what criteria might be used to assess the risk of rural travel by large buses.

Our transportation counterparts in the engineering world tend to think only of primary prevention of crashes as the solution, or evaluating risk whether it's physical roadway characteristics or other criteria. The EMS community is more likely to think about post-crash interventions that—depending on resource availability or practices in the area—could pose a risk to crash victims. The group also wanted to highlight the recommendation about FHWA using those criteria as part of their SAFETEA-LU thinking or the next generation of SAFETEA-LU and highway safety improvement projects.

The EIRRA document is framed around the question: What preparation or planning or activities would be done in an area in advance of an MCI for it to be optimally prepared. So these are human choices about interagency, interpersonal, group, or individual activities. The scale of responses was adapted from a resource developed by HRSA to evaluate trauma systems. The scale of responses run from “unknown” (there's never been an attempt to evaluate whether this practice is in place), to “none,” or on the high end, “awesome.” It also therefore, allows for identification of opportunities for improvement.

The components of EIRRA are: 1) EMS and other types of personnel; 2) infrastructure; 3) emergency care systems, clinics, facilities, hospitals and trauma systems; 4) public awareness and notification; 5) evaluation; 6) mass casualty specific planning; 7) governance; and 8) state specific guidelines spelled out into their own addendums to decrease confusion for users. Every one of those categories and several sub categories exist along with indicators. The user reads the descriptions, records a score and enters values in a protected Excel spreadsheet which calculates medians for them.

The group also addressed some automatic vehicle location use in EMS systems, as well as other opportunities for systems improvement related to advanced automatic crash notification (AACN) or the use of remote weather information systems. The group discussed tying those into EMS from transportation systems, particularly for helicopter EMS purposes. Gainor refers to the PowerPoint presentation to show what the EIRRA looks like on-screen, where data can be entered, and how an overall median score is calculated. She adds that the document can be utilized at the regional, state, multi-agency or local level and used as well to measure progress over time. Gainor also notes that if the jurisdiction was mostly 2's when they started out, a year later they're mostly 3's and 4's. EIRRA also can be used to identify opportunities to achieve systems improvement in regard to hazards other than rural MCIs, including as a fairly objective way to determine differences between areas.

Gainor began the discussion about MIECE by noting it is a little more objective because this document is about quantifiable resources. She said it was necessary to create MIECE in tandem with EIRRA. MIECE is modeled after the Model Minimum Uniform Crash

Criteria (MMUCC) as well as MIRE, the Model Inventory of Roadway Elements. As this tool is used to assess the risk of rural travel, the physical resources available to respond to a multi-victim crash on a rural highway again is in itself a measure of risk. Given that more is better, transportation engineers were fascinated to learn about the paucity of resources.

For instance, the group shared with them basic examples such as the one-hour ground transport time map from CDC and the American College of Surgeons on the availability of trauma centers. That map covers a lot of rural highway and it only refers to the interstate highway system. It illustrates that there are vast stretches of highway where victims are at risk because they are so far from trauma care. Therefore, the group decided to drill first into state-level utility and use the interstate system exclusively to get a handle on the task, although ASHTO made it clear that they strongly believe this should be used for every roadway.

The state level components are evaluated on a per county basis and these in the MIECE are fairly similar to what's in EIRRA. She emphasizes again however, that the MIECE is about quantifiable resources, not activities or practices. That's not limited to just EMS personnel, transportation, ambulances and helicopters, but covers equipment, medical facilities, public service answering points, other communications and the ubiquitous "other." The operational question for this project was, "if an MCI happens on the midpoint of a stretch of interstate highway in this county (ex: Dawson County, Montana) what resources would be available to the victims of that crash?" It creates a common, defined measurement system with a geographic focus and allows for comparison between areas, although it does not control for the length of a highway segment. That is significant because some Western states have counties that are as large as some small Mid-Atlantic states.

The categories of MIECE are Personnel, Transportation, Communications, Equipment, Medical Facilities, and other. "Other" does get into practices somewhat but the focus is still on the physical in that there's still a unified command system, the use of transportation incident management practices, or adoption of those systems. Looking at a given state, the midpoint of that interstate highway becomes the focus area and the location from which the clock will start if a crash were to occur.

Using that midpoint of that interstate in that county, the measurement of response became: what is the count of ambulances that could arrive in 30 minutes? What's the count that could arrive in 60 minutes and what's the count that could arrive in 90 minutes? If they can only get three or fewer ambulances out there within 30 minutes, that would be color-coded red, which is not good. Essentially, the aim is to come up with scales that are regarded as "acceptable" to land in this color scheme of red, yellow or green. Once the measures are tabulated, the various stretches of highway could be color-coded based on resource availability. Then it is possible to assess across a region the differences of what might otherwise be considered comparable stretches of highway.

The primary user is intended to be the state EMS office, although clearly effective use would require significant partnering with local EMS systems and agencies. It is not intended to presume solutions, because in all cases more is not necessarily better. But that's where the scaling comes in for future generations of this document. From a limitations standpoint, it's also a way for rural areas to determine their strengths and to gain an understanding of where conditions are better, then to determine how those differences in capability occurred and how they might make improvements. The objective was to demonstrate—according to the NTSB recommendation—that the system can be evaluated and also that it can be graphically displayed. The group has gotten a tremendous amount of positive feedback from state EMS officials both for EIRRA—28 states piloted EIRRA and four did it in conjunction with a regional or local EMS system to prove its utility. MIECE has also garnered a great deal of interest, especially in the transportation community. Gainor offered to take questions.

Adirim commented that for the next iteration the group may want to think of some measures to assess how well this could work to aid children who may be MCI victims.

Strickland asked about EIRRA and the intersection of assessment possibilities of connected vehicles. NHTSA is currently working on this in collaboration with CDC on the advanced automatic crash notification. Is there a way for states to gather and assess data from connected vehicles, to make a decision regarding trauma levels, for example.

Gainor said the working group talked about this at length and determined it was a critical area, although for several members' consideration of these factors is new territory. For example, ambulances with the ability to automatically and remotely retrieve weather station information—so they have a better understanding of conditions near the crash site, especially in a place where the weather can be dramatically different over short distances—that is important information. The group also talked about the application of an urgency algorithm so that telematics data might provide an indication of how severely injured the victims might be. A minivan with as few as eight patients can overwhelm a rural EMS system. The hope is that the guidelines, when reviewed at the state and local level will spark reflection, realization, discussion, partnerships and activities that begin to address these issues.

Strickland commented that maybe this is an opportunity for the group to interface with NHTSA's research staff through Dawson. He also noted that the White House is considering leveraging a broader deployment of AACN. The White House Office of Science and Technology has expressed great interest in this. So, regarding assessment of rural capabilities maybe this is something to bring to their attention as a chance for everyone to intersect.

Garza said that the production of these instruments really demonstrate how EMS is starting to mature and focus on public health issues. He asks whether Gainor got any negative feedback. Garza makes a comparison with H1N1 where there was a lot of hesitation to give out state data on mortality because states were concerned about their reputations.

Gainor answered that there were two states that raised precautionary observations. One was regarding the “report card” nature of both documents. The other was a very astute observation that more is not always better. A state expressed concern over knee jerk solutions. More specifically, that the use of MIECE, for example, might lead to the over population of helicopter transport in response to the need for some emergency vehicle service in a red area.

Garza asked whether there had been any interest outside of EMS and as an example states that the American Automobile Association (AAA) should find this interesting.

Gainor noted that the AAA Foundation had expressed interest given their work on the U.S. Road Assessment Program. They are a few steps ahead of the working group in terms of graphic depiction. There is also interest from transportation partners traditionally more engaged in the engineering world that doesn’t talk about EMS on a regular basis. MIECE especially, speaks their language. So there’s been a lot of interest from those partner associations.

Garza asked whether there has been any interest in correlating the data findings with clinical outcomes.

Gainor responded that there absolutely had been a discussion among state EMS directors. Possible questions for thought would be: What if there was a simple correlation between fatality rates and color? And what if it lines up?

Garza thanked Gainor for an excellent presentation.

Bass then made the request for FICEMS’ approval of the interim report to the NTSB. Included in the interim report will be the EIRRA, MIECE and workshop summary. It is anticipated that the report will be finished by the end of the year.

Garza called for a motion to approve the interim report and the supporting documents to submit to the NTSB. It is so moved, seconded and unanimously approved. He stated that next, Dr. Hunt will present an update on the FICEMS report to NTSB on Helicopter EMS.

### **Helicopter EMS Update**

Dr. Hunt began by noting that the NTSB made recommendations to FICEMS in 2009. The first was to develop guidelines regarding the use and availability of helicopter emergency medical transport by local, state and regional authorities during emergency medical response systems planning. The second recommendation was to develop national guidelines for the selection of appropriate emergency transportation modes for urgent care. One speaks to integration of helicopters into a system and the second to whether it is better to transport a grievously injured person by air or ground. The Medical Oversight Committee has provided assistance and guidance in developing a strategy in response to those recommendations.

That strategy was presented to and approved by FICEMS in 2009 and FICEMS sent a letter outlining the strategy to the NTSB in March 2010. A follow up progress report was sent in December 2010. Those recommendations really speak to all time-sensitive conditions yet, it is necessary to begin somewhere, so the committee began with the recommendations as they apply to injuries. There is obviously a need to consider the recommendations as they apply to stroke, acute myocardial infarction, etc., but that will happen in time.

There was great alignment between the Children's National Medical Center evidence-based guideline award and the need for a clinical helicopter medical emergency services guideline. So, the committee chose to use the Children's Medical Center evidence-based guideline as a basis for the development of a helicopter EMS guideline. There is a big distinction between the word "guideline" and "protocol" in terms of project implementation. Guidelines are suggestions, protocols are specific.

With regard to recommendation two, the Children's National Medical Center evidence-based guidelines project is developing draft guidelines for helicopter EMS utilization for trauma victims. Hunt said the Medical Oversight Committee is beginning to discuss ways to support development of evidence-based guidelines for transport with other kinds of time-sensitive conditions as well. In terms of the recommendation about guidelines for the use and availability of helicopter EMS by local, state and regional authorities during emergency medical systems response planning, Hunt states that the CDC and NHTSA signed an interagency agreement and that CDC has the lead on executing the work. In careful collaboration with NHTSA, the committee convened an expert panel to identify relevant topics for development of the use and availability guidelines. The working group plans to draft a straw man document by late 2011 and those draft guidelines would be vetted before a large stakeholder group hopefully in early 2012.

Garza called for a short break. Upon reconvening the meeting, he announced that he would need to leave early. He asked David Strickland to step in for him, then called for the next agenda item, the presentation of the draft National EMS Assessment.

Giving a brief overview, Garza stated that the National EMS Assessment is a project undertaken by FICEMS and funded by NHTSA. The Assessment is a first step towards fulfilling FICEMS' statutory duty by identifying needs throughout the national EMS community. Garza asked principal investigator, Dr. Greg Mears from the University of North Carolina EMS Performance Improvement Center, to report.

### **The National EMS Assessment Update**

Mears stated that the National EMS Assessment project has been challenging given the following priorities:

- To describe EMS from a systems vantage point, instead of using individual components
- To use existing data sources

- To describe EMS nationally, but also to drill down to the state and local level if possible

He said the group knew there'd be some gaps and decided early on to identify expert panels to get some subjective information on things that might be so recent or so cutting edge that there would be no way to measure them through an existing data source. Mears said that FICEMS can use this information in its leadership role of EMS.

Currently, the Assessment is about 500 pages of content using 200 data points that are being consolidated. The key data sources for this ended up being an industry snapshot created by the National Association of State EMS Officials. At the end of 2010 and in early 2011, they provided that information for this project. The second largest source of information was from the National EMS Database with NEMSIS. There were two expert panels, one on EMS and one on emergency management.

Mears stated that his presentation would consist of a list of things that were not known before the project was undertaken. He added that the list would likely generate more questions than answers, but it would convey a brief snapshot of what this report contains. Each of these items is much more detailed in the report. [Note: the final National EMS Assessment may vary somewhat from this information.]

- There are now 19,971 EMS organizations that are credentialed in our nation. This does not include territory data. Of the credentialed EMS agencies, 92 percent are 911-based responders. Only about five percent are non-emergent medical transport agencies. Within that five percent, as much as 30 percent of the nation's EMS volume resides and is not 911-based.
- There are just over 80,000 EMS vehicles, which is about three vehicles per 10,000 population. Those numbers are fairly consistent across states, regardless of the state's size (either by population or square mileage in terms of size). The majority of those are ALS, with 55 percent. There are 1,549 air medical vehicle that were identified.
- According to state EMS director opinion for all 50 states, there is no strong opinion on whether EMS agencies are declining. The group did find however, that operationally, over  $\frac{3}{4}$  of them believe the number of volunteer services is declining. Conversely, they believe the number of paid EMS agencies is increasing.
- There are a little more than 825,000 EMS professionals counting only EMT basic, intermediate, and paramedic level entities. The reason for using basic EMT level professionals is that only 30 states credential first responders. Only eight states credential medical responders, so these were the common professional levels that everyone credentials. This calculates out to about 30 EMS professionals per 10,000 population. The majority of those are EMT basic level—about  $\frac{2}{3}$ —and about  $\frac{1}{4}$  are paramedics.

- Looking at demographics of the professionals, 2/3 are male, 75 percent are white, eight percent are black, five percent Asian and four percent are American Indian/Alaska Native. All other minorities were grouped in that last eight percent. There are about 8,500 local EMS medical directors in the country with information from 49 of 50 states.
- On information systems, 44 of 50 states have implemented some level of a state data system, but only 39 of the 44 actually require local submission of data. Only 11 states collect 100 percent of their EMS events. Thirty-one states will be in the 2010 National EMS Database, so that's 62 percent of states submitting.
- As for responses, there were almost 37 million EMS responses in our country in 2010. Even though there were five or six states that didn't provide data, there are a very standardized number of responses by population regardless of the state. This calculates to just over 1,200 events per 10,000 population. Statistically, that represents a solid comfort index when extrapolated across the nation. There are 37 million responses to 28 million transports, which is about  $\frac{3}{4}$  of the responses. Certainly, the national database is gaining almost monthly on participation level but they still currently, (using 2009 data), only represent about 22 percent of the EMS volume.

A question is raised about numbers. If 1,200 per 10,000 population was the mean, was there a wide distribution?

Mears responded no, that it was very narrow. The confidence level is very good for that figure as it is on the number of agencies, which are about three agencies per county. Even out West where counties are very large, the number of agencies in those counties is very similar to the numbers in urban settings. Mears continued his report on the list.

- With regard to workforce health and safety, only 12 states currently have a wellness and prevention program that they recommend for their EMS professionals. Only one state monitors their job injury data. Eighteen states monitor on-the-job fatalities, and 11 states just monitor EMS vehicle crash data.
- Funding is one of the most difficult areas to get a handle on and describe. The information is very high level. One third of the state EMS budgets come from their general state budgets, with about 19 or 20 percent coming from motor vehicle fines or fees. About seven percent of EMS budgets come from preparedness funds. There is really no data to describe local EMS funding in any kind of organized way. Three states have determined what they think their costs are for 911-based EMS transport.

Mears reported then on subjective information gathered from the expert panels. He said that there are huge variations in how EMS agencies are defined by different states. That fact makes analysis and calculation very difficult. The experts support the concept that

volunteerism is declining, but are also quick to note that the definition of a “volunteer” is different from one location to the next. In fact, some states change the definition of a volunteer from year to year to allow for more compensated professionals. Even though the work may be categorized under the label “volunteer,” there are often benefits associated with the work so the definition changes to account for the need.

Mears said that dispatch centers are often not regulated. Vehicle crash data and workforce safety is still in its infancy, but regionalized systems of care are growing, especially across the trauma/stroke/STEMI/cardiac arrest fields. Even so, there is little structure from state to state and each state may be doing it in a unique way. Education is a challenge, although there is a belief that degrees are better than certification. Performance improvement is also in its infancy across states, but there are more initiatives moving towards that.

Mears noted that EMS has been invited and does often sit at the table with disaster preparedness, although the funding for EMS disaster preparedness is very minimal. State EMS offices—in the current economic downturn—are limited in their ability to provide leadership. These offices are just trying to stay on top of their regulatory duties. On the preparedness side, EMS has been invited and participated in these programs, but again funding is an issue. Mears said that there has been a significant amount of regionalized resource deployment and the panels confirmed that EMS has been able to access those resources locally and use them as needed.

Finally, he said on the EMS preparedness side there is great interest in ensuring there is knowledge in how to locate and care for children and other vulnerable populations.

Mears said data systems are catching up on gap analysis but still have a way to go. He noted that state EMS offices are the key because having this information at the state level will be central to future analysis. Version 3.0 of NEMSIS will greatly improve and drive this with more timely data that is more objectively defined. Finally, he stated there is a glaring need for EMS workforce, health and safety data.

Mears asked if there are any questions.

Adirim commented that she was hoping to see some specific information on EMS and pediatric issues, patient care for children, answers to questions about equipment, etc.

Mears responded that there are no data sources for that and reiterated that one of the rules for this project was to use existing data sources. He added that there is a little bit of information in the national database about that, but it’s hard to know what agency it is from or what percent of a given state it might represent.

Garza said that the report goes to show the maturation of EMS and the direction where the field and FICEMS should move in the future.

Lou Lombardo asked whether fire equipment was included in the data on transport vehicles.

Mears responded that when defining specialty service capabilities equipment and the people who use the equipment were both covered.

Mears further added that it was a question across each state as to whether the capabilities were there for specific types of rescue and whether EMS could arrive in a reasonable period of time.

Someone asked for the definition of an EMS incident to which Mears responded that an EMS incident was defined as a response with patient contact.

#### **Report on Federal Pediatric EMS Activities for Senator Inouye**

Garza noted that FICEMS received a request for a report from Senator Inouye to create a report on current Federal activities related to pediatric emergency medical services. The TWG drafted the document. Drew Dawson reported on the status.

Dawson said that FICEMS received the letter in late 2010. The report was drafted and circulated to FICEMS for concurrence. There were some recommended changes by agencies so the changes are currently being incorporated. HRSA is taking the lead on reformatting and the second iteration is now being reviewed by the Technical Working Group and should be re-circulated to FICEMS within a week.

Dawson again was called on to give an update on the National EMS Advisory Council (NEMSAC).

#### **National EMS Advisory Council Report**

Dawson noted that Secretary LaHood re-chartered the 24-member Council in April 2011 for another two-year term. The Council serves as a forum for experts from around the country to debate issues and provide input to the Department of Transportation, as well as FICEMS. The group met via Web conference in February and in person in April of this year. The next public meeting via Web conference is on August 10. Registration information will be available on EMS.gov shortly.

He reported that a major item at the in-person meeting was to adopt a position statement on the creation of a Federal lead office for emergency medical services. The position statement is available at EMS.gov. Secondly, Dawson said that Mr. Strickland recently appointed a new NEMSAC chair. The new chair, Aaron Reinert, has been a NEMSAC member since its inception and is the executive director of Lakes Region EMS in Minnesota. He said that NEMSAC's five committees very closely mirror those of FICEMS and are also working on recommendations for evidence-based guidelines, implementation of the Education Agenda for the Future, financing issues and more. FICEMS should keep NEMSAC in mind as a tremendously valuable resource.

Mr. Strickland assumed the Chair position upon Dr. Garza's departure and moved to the strategic planning committee agenda item, noting that FICEMS already endorsed a strategic planning process. He asked Dawson to update the committee on those activities.

**FICEMS Strategic Planning, Charter Development and Operational Procedures**

Dawson began his report by noting that last year, FICEMS recognized the importance of engaging on a more formal strategic planning process. The purpose of the planning would be two-fold: to better align the activities, goals, and priorities of the participating agencies, and to help develop some more common strategies and goals. He said as well that the aim is to ensure, to the extent possible within all the agencies and legal authorities, that FICEMS is channeling its energies and resources accordingly. Dawson said that the DHS Office of Health Affairs has contributed some funding to help with the strategic planning process. This money would be spent to hire someone whose focus would be to help FICEMS work through this. That person will help to define a more formal strategic planning process and also help to draft a charter. As FICEMS begins dealing with more issues of national significance, the committee has seen that it must fine-tune how it functions operationally to more clearly specify how it is that FICEMS conducts business, who sees what when, how the Committee takes votes, etc.

Strickland thanked Dawson and opened the floor for questions.

Adirim commented that NEMSAC seems like the perfect body to help determine priorities. Her second comment was that the strategic planning process can take a bit of time and it would be good to have some interim process in place, specifically with regard to how documents get coordinated and concurrence on the same.

Dawson responded that with respect to NEMSAC, this would be an ideal opportunity to look at those priorities and to consider them as the strategic planning process begins. Regarding an interim process for concurrence—including the report to Senator Inouye—it has become apparent that the process could use some fine tuning. Dawson said that there are a couple of possible options for consideration. One option is that as the Committee votes on documents, those are then sent to the designated principal on FICEMS, the person who has been established under the law for their concurrence formally by e-mail. That individual could perhaps then create a grid that allows them to record changes, which would allow NHTSA, as the formal staff, to keep track of that for FICEMS.

Dawson said that a second process in the Federal government is the use of the Executive Secretariat (Exec Sec) process. He explained that this is a formal mechanism among agencies for review and concurrence on documents. Dawson said that usually that process is reserved for things that require agency-wide approval. The challenge with FICEMS is that it is a statutorily created entity, so the principals have voting authority without having to get agency-wide input. Therefore this option might require some tweaking.

Strickland thanked Dawson and called for questions or discussion.

There were more comments from Adirim regarding Exec Sec.

Strickland stated that he would really like to have the chair present for this kind of discussion and briefly alluded to some of his concerns. Because FICEMS is an interagency committee, it is an entity unto itself. This raised questions about using individual Exec Secs to come to concurrence when there is probably something that is a little less weighty.

Adirim continued advocating for the use of the Exec Sec as a tool to coordinate. She then suggested that perhaps there is an opportunity for an offline discussion to decide. Strickland suggested that the issue be tabled until the chair is present.

Strickland then asked for any other comment. There being none, he moved on to general discussion. He stated that since there has already been discussion about strategic planning, this is basically an opportunity for any other issues that might be brought up and addressed.

Strickland proceeded then to agenda item 12 and called for any discussion about emerging issues. He then asked if there were any additional matters members would like to discuss.

When there was no response, Strickland called for discussion of other business. He then moved on to the general comment period for the public.

Strickland closed the meeting and made note that the next public meeting is in December. He thanked everyone and concluded the session.